

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	: 10/581,862	Confirmation No. :	3922
First Named Inventor	: Ottmar GEHRING		
Filed	: January 25, 2007		
TC/A.U.	: 2455		
Examiner	: Edward J. Kim		
Docket No.	: 095309.57760US		
Title	: Method for Operating Software Modules		

AFTER FINAL REQUEST FOR RECONSIDERATION

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Commissioner for Patents
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Sir:

In response to the final Office Action dated November 17, 2008, reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-6 and 8-10 remain pending.

Claims 8 and 10 are rejected under 35 U.S.C. § 112, second paragraph for indefiniteness. This ground of rejection is respectfully traversed.

The rejection states that “it is unclear to what the terms, ‘primary tasks’ and ‘secondary tasks’, are referring to, rendering the claims vague and indefinite to what the claimed subject matter is.” It is respectfully submitted that when these terms are read in view of the specification and given the interpretation that would have been accorded by one of ordinary skill in the art, these claim terms are definite.

As discussed in M.P.E.P. § 2173.02,

[t]he essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity.

Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

(A) The content of the particular application disclosure;

(B) The teachings of the prior art; and

(C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

Regarding element (A) above, the general concept of the primary and secondary tasks are described in the application as filed, at least at paragraphs 0025 and 0026. Thus, when claim 8 is read in light of the specification, these terms would be clear as used in claim 8.

Furthermore, regarding element (C) above, the terms “primary”, “secondary” and “tasks” are common words in the English language, and one skilled in the art without even referring to the specification would understand what is meant by the terms “primary task” and “secondary task.”

Because the terms “primary task” and “secondary task”, when read in light of the content of the application and based on the interpretation that would have been provided by one skilled in the art, sets out and circumscribes the particular subject matter with a reasonable degree of clarity, the rejection of claims 8 and 10 for indefiniteness should be withdrawn.

Claims 1-3 and 5, 6 and 8-10 are rejected under 35 U.S.C. § 103(a) for obviousness in view of the combination of U.S. Patent No. 5,544,054 to Kayano et al. ("Kayano") and U.S. Patent No. 7,308,499 to Chavez ("Chavez").¹ Claim 4 is rejected for obviousness in view of the combination of Kayano, Chavez and Official Notice. These grounds of rejection are respectfully traversed.

Regarding the rejection of Applicants' claim 1, it appears that this rejection has not considered the claim as a whole. In particular, claim 1 recites two different types of information, the first being sent by a software module and the second being sent by a controller. The specifics are these two types of information as set forth in claim 1 can be seen below:

1. information indicating the software module's operating status and the identity of the controller on which the software module is running;
2. information sent by the controllers...*[that]* is indicative of their available computational capacity.

The combination of Kayano and Chavez does not disclose or suggest both of these types of information.

The rejection appears to rely upon Kayano for the disclosure of both of these types of information, and Applicants' previous Reply addressed why the Kayano does not disclose or suggest the first type of information set forth above. Nevertheless, the Response to Arguments section of the final Office Action again cites to column 2, line 65 through column 3, line 12 and column 3, lines 40-47 for

¹ Although the header of this rejection does not reference claim 10, this claim is addressed in the body of the rejection.

the disclosure of the first type of information, which are the same sections cited to reject the claimed second type of information. The cited sections, however, do not disclose or suggest the first and second type of information recited in Applicants' claim 1.

Referring now to FIG. 1 of Kayano (reproduced below), column 2, line 65 through column 3, line 12 describes that load detecting means A 100 detects the load states of control units A 101 and B 102. In the case of control unit B 102, load detecting means A 100 transmits the detected load states to control means B 106 and memorizing means B 104.

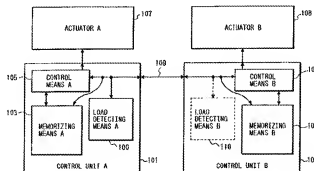


FIG. 1

Thus, this section at most discloses transferring a single type of information, i.e., load information. This single type of information cannot be interpreted as both:

1. information indicating the software module's operating status and the identity of the controller on which the software module is running; and
2. information sent by the controllers...[that] is indicative of their available computational capacity.

Column 3, lines 40-47 discuss the embodiment of FIG. 2 of Kayano (reproduced below), in which load detecting means 2 uses outputs from sensors 1 indicating the running states of the automobile to determine the load states of control means A 3 and B4, and the determined load states are sent to the control means.

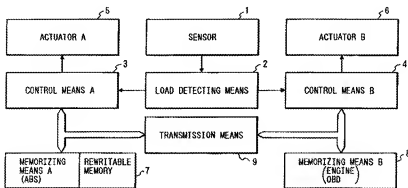


FIG. 2

This sensor data cannot be interpreted as both:

1. information indicating the software module's operating status and the identity of the controller on which the software module is running; and
2. information sent by the controllers...[that] is indicative of their available computational capacity.

Additionally, Kayano describes that the arrangements of FIGs. 1 and 2 are different embodiments, and does not disclose or suggest that the two embodiments could, or should, be combined. Nor has the Office Action set forth any reasoning to support an interpretation of Kayano that would combine the two different embodiments of FIGs. 1 and 2. Accordingly, the Office Action has met the initial burden of providing reasoning to support the interpretation that Kayano discloses or suggests both of the types of information set forth in claim 1.

The rejection relies upon Chavez for the disclosure of the determining, but Chavez does not remedy the above-identified deficiencies of Kayano set forth above.

Claims 2-6 are patentably distinguishable at least by virtue of their dependency from claim 1. Claim 9 recites similar elements to those discussed above with regard to claim 1, and is patentably distinguishable over the current grounds of rejection for similar reasons.

The combination of Kayano and Chavez does not render claim 8 obvious because the combination does not disclose or suggest that “the process cycle for the controllers is determined by the software modules for one of the primary tasks, the operating system and a bus protocol.” Thus, the process cycle of Applicants’ claim 8 is determined based on the following three elements:

1. the software modules for one of the primary tasks;
2. the operating system; and
3. a bus protocol

As previously discussed, Kayano at most discloses the use of an interrupt that is based upon braking, brake off delay, or a 10 ms interval, but does not disclose or suggest using the three elements set forth in claim 8 in order to determine the process cycle of the controllers.

Based on the Response to Arguments section of the final Office Action, it appears that the rejection of claim 8 does not account for all of the elements recited in claim 8, such as the three elements set forth above, but instead at most

asserts that Kayano discloses a process cycle. In particular, the Office Action states that “the cited references [*suggest*] that the *process cycle* is determined by the software module, and corresponds to the total time the processor was used, and is utilized for sending data such as the utilization level, state, etc.” The Office Action also states that “since Kayano discloses that the system is constantly and regularly acknowledging the load states and the utilization levels... it would have been obvious...to have set intervals, such as process cycles to output, check, and determine the status of each controller.”

Notably absent from this or any other portion of the Office Action is any mention of a process cycle that is determined based on the three elements set forth above. Applicants’ claim 8 does not merely recite a process cycle in the abstract, but instead specifically recites that the process cycle is determined “by the software modules for one of the primary tasks, the operating system and a bus protocol.” In view of the absence of such a disclosure or suggestion by Kayano or Chavez, and the failure of the Office Action to identify how Kayano and Chavez, either alone or in combination, discloses a process cycle determined based on the three elements set forth above, the Patent Office has not set forth a *prima facie* case of obviousness with respect to claim 8.

Finally, regarding the “Examiner’s Note” set forth on page 12 of the first Office Action and in paragraph 12 of the final Office Action, regarding the application of passages and figures other than those cited in the Office Action, Applicants would also like to note that the Supreme Court has made clear that

[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious... [and] that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.²

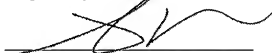
If the Patent Office intends to rely upon passages of Kayano or Chavez other than those actually cited, such passages should be cited so that “the analysis supporting...[*the rejection is*] made explicit.”

If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 095309.57760US).

Respectfully submitted,

February 17, 2009



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² M.P.E.P. § 2142, citing KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1396 (2007).